

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A network interface configured to connect ~~connectable~~ to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data,[[;]] said network interface comprising:

a plurality of data handling nodes; and

a routing arrangement responsive to a packet identifier configured to route ~~for routing~~ data packets between said data handling nodes,[[;]] wherein in which:

one of said data handling nodes is a network processor configured to receive ~~for receiving~~ one of the data packets from and configured to transmit ~~transmitting~~ another of the data packets to said packet-based network,[[;]] said network processor ~~being~~ configured ~~operable~~:

a) in the case of a data packet received from said data network,

to detect a type of payload data from said network-based packet header data,[[;]] to remove said network-based packet header data from said packet,[[;]] and to associate with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data handling node,[[;]] and

b) in the case of a data packet received from another data handling node and having an associated packet identifier,

to detect a type of payload data from said packet identifier,[[;]] to remove said packet identifier,[[;]]

to apply network-based packet header data in dependence on said packet identifier,[[;]] and
to launch said data packet onto said network.

Claim 2 (Currently Amended): A network interface according to claim 1, wherein in
which one of said data handling nodes is a data processing arrangement.

Claim 3 (Currently Amended): A network interface according to claim 1, wherein in
which one of said data handling nodes is a computer interface.

Claim 4 (Currently Amended): A network interface according to claim 1, wherein in
which said identifier includes comprises a type identifier configured to define defining a
target data handling node, and an action identifier configured to define defining a data
handling operation to be carried out by said target data handling node.

Claim 5 (Currently Amended): A network interface according to claim 4, wherein in
which said routing arrangement includes comprises a demultiplexer configured to
demultiplex ~~for demultiplexing~~ different types of packets to different routing paths in
dependence on said type identifier.

Claim 6 (Currently Amended): A network interface according to claim 5, wherein in
which a respective multiplexer is associated with each data handling node, each multiplexer
~~being arranged~~ configured to receive data packets from said routing paths which have that
data handling node as a target node.

Claim 7 (Currently Amended): A network interface according to claim 4, wherein in
which:

 said types of payload data include audio data and video data,[[;]] and
 one of said data handling nodes is an audio/video processor configured to extract for
extracting at least one of an audio and [[and/or]] a video data from a packet payload and
configured to generate generating an output audio and/or video signal.

Claim 8 (Currently Amended): A network interface according to claim 7, wherein in
which: in the case of a data packet received from said data network including having an audio
or video data payload,

 said network processor is configured arranged to associate with said packet an action
identifier which specifies whether said payload includes comprises audio or video data and a
type identifier configured to specify specifying said audio/video processor as said target data
handling node,[[;]] and

 said audio/video processor processes said data packet as audio data or as video data in
dependence on said action identifier.

Claim 9 (Currently Amended): A network interface according to claim 1, wherein in
which:

 said network processor has an associated memory,[[;]]
 said types of payload data include at least video data,[[;]] and
 said network processor is configured to operate operable in a second mode wherein in
which an incoming video data packet is stored in said memory at a storage location
dependent upon said video data carried by that packet; said video data being subsequently
read out for output via a data handling node.

Claim 10 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said storage location depends on pixel position(s) relating to said video data.

Claim 11 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said video data is read out from said memory substantially straight after being stored in
said memory.

Claim 12 (Currently Amended): A network interface according to claim 9, wherein in
~~which~~ said video data is read out from said memory a predetermined delay period after being
stored.

Claim 13 (Currently Amended): A network interface according to claim 1, wherein in
~~which~~ at least one of said types of payload data represents asynchronous data to be carried by
said network.

Claim 14 (Currently Amended): A data network, comprising:
~~a plurality of data handling nodes, each having a network interface according to claim~~
~~1; and~~
a data network connecting ~~said a plurality of~~ data handling nodes via ~~said~~ respective
network interfaces, wherein
the plurality of data handling nodes each have a network interface according to claim
1.

Claim 15 (Currently Amended): A network according to claim 14, wherein in which each data handling node includes comprises at least one of a source and [[and/or]] a sink of data according to at least one of said types of payload data.

Claim 16 (Currently Amended): A data handling node, including having:
at least one of a source and [[and/or]] a sink of data according to at least one of said types of payload data according to claim 1; and
a network interface according to claim 1.

Claim 17 (Currently Amended): A method of operation of a network interface configured to connect connectable to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data,[[;]] said network interface including comprising a plurality of data handling nodes,[[;]] and a routing arrangement responsive to a packet identifier configured to route for routing data packets between said data handling nodes,[[;]] wherein in which one of said data handling nodes is a network processor configured to receive for receiving data packets from and transmitting data packets to said packet-based network,[[;]] said method comprising the steps of:

a) in the case of a data packet received from said data network,

detecting a type of payload data from said network-based packet header data,[[;]]

removing said network-based packet header data from said packet,[[;]] and associating with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data handling node,[[;]] and

b) in the case of a data packet received from another data handling node and having an associated packet identifier,

detecting a type of payload data from said packet identifier,[[;]]

removing said packet identifier,[[;]]

applying network-based packet header data in dependence on said packet identifier,[[;]] and

launching said data packet onto said network.

Claims 18-19 (Canceled).

Claim 20 (Currently Amended): ~~A medium according to claim 19, said medium being a storage medium A computer readable tangible storage medium encoded with a computer readable program configured to cause an information processing apparatus to execute a method of operation of a network interface configured to connect to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data, said network interface including a plurality of data handling nodes, and a routing arrangement responsive to a packet identifier configured to route data packets between said data handling nodes, wherein one of said data handling nodes is a network processor configured to receive data packets from and transmitting data packets to said packet-based network, comprising:~~

a) in the case of a data packet received from said data network,

detecting a type of payload data from said network-based packet header data,

removing said network-based packet header data from said packet, and

associating with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data handling node, and

b) in the case of a data packet received from another data handling node and having an associated packet identifier,

detecting a type of payload data from said packet identifier,

removing said packet identifier,

applying network-based packet header data in dependence on said packet identifier, and

launching said data packet onto said network.

Claim 21 (Canceled).